

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Before the Board of Patent Appeals and Interferences

In re Patent Application of

Atty Dkt. RYM-36-1439

C# M#

Confirmation No. 6037

TC/A.U.: 2144

Examiner: Maniwang, J.

Date: December 18, 2007

TITMUSS et al

Serial No. 09/868,221

Filed: June 15, 2001

Title: MOBILE COMMUNICATIONS NETWORK



IFW
AF

Mail Stop Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

☐ **Correspondence Address Indication Form Attached.**

☐ **NOTICE OF APPEAL**

Applicant hereby **appeals** to the Board of Patent Appeals and Interferences

from the last decision of the Examiner twice/finally rejecting applicant's claim(s). \$510.00 (1401)/\$255.00 (2401) \$

☐ An appeal **BRIEF** is attached in the pending appeal of the above-identified application \$510.00 (1402)/\$255.00 (2402) \$

☐ Credit for fees paid in prior appeal without decision on merits -\$ ()

☒ A reply brief is attached. (no fee)

☐ Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s)
One Month Extension \$120.00 (1251)/\$60.00 (2251)
Two Month Extensions \$460.00 (1252)/\$230.00 (2252)
Three Month Extensions \$1050.00 (1253)/\$525.00 (2253)
Four Month Extensions \$1640.00 (1254)/\$820.00 (2254) \$

☐ "Small entity" statement attached.

Less month extension previously paid on -\$ ()

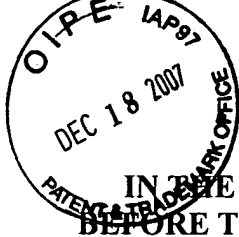
TOTAL FEE ENCLOSED \$ 0.00

Any future submission requiring an extension of time is hereby stated to include a petition for such time extension. The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our **Account No. 14-1140**. A duplicate copy of this sheet is attached.

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By Atty: Raymond Y. Mah, Reg. No. 41,426

Signature: 



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REPLY BRIEF

Sir:

Appellant hereby submits this Reply Brief under the provisions of 37 C.F.R. 1.193(b) in response to the Examiner's Answer mailed October 18, 2007. The arguments set forth in the Appeal Brief dated July 2, 2007 are incorporated herein. The following arguments are presented in response to new arguments presented in the Examiner's Answer and to further clarify Appellant's previous positions.

Zhao fails to disclose "wherein the mobile terminal sends to the home agent information about the types of networks to which the mobile terminal is currently connected, the available bandwidth for each type of network to which the mobile terminal is currently connected, and the mobile host's care-of address applicable for each type of network to which the mobile terminal is currently connected, the home agent selecting an appropriate network and its applicable care-of address based on the available bandwidth for each type of network to which the mobile terminal is currently connected" under 35 U.S.C. §102 as required by independent claim 1 and its dependents. Similar (but not necessarily identical) comments apply to independent claims 9, 10 and 15.

Pages 8-9 of the Examiner's Answer argues the following:

“Zhao also disclosed providing ‘mobility-aware applications with an API to specify their QoS requirements instead of requiring them to bind flows explicitly to specific interfaces’ (see section 9). Clearly, the ability of the mobility-aware applications (i.e., mobile terminals) to specify QoS requirements would include a provision to send the home agent information about the bandwidth of the networks it is connected to since QoS involved bandwidth considerations (see section 5.1). As such, the disclosure of Zhao allowing for interface selection to be based on a requested QoS reads on the broad concept of a home agent selecting a network and care-of address based on the available bandwidth for each network a mobile terminal is connected as claimed.”

Appellant respectfully disagrees with the Examiner's argument that “Zhao allowing for interface selection to be based on a requested QoS reads on the broad concept of a *home agent* selecting a network and a care-of address *based on the available bandwidth for each network a mobile terminal is connected as claimed* (emphasis added).” In Zhao, it is the mobile host, not the home agent, which selects which network to use. That is, Zhao's mobile host instructs the home agent which network to use. For example, consider the following explicit recitations of Zhao (emphasis added):

“The other mechanism enables a mobile host to make use of multiple active network interfaces simultaneously and to control the selection of the most desirable network interfaces for both outgoing and incoming packets for different traffic flows.” Abstract.

“In our framework, a mobile host may choose to receive the packets belonging to a given flow on any of its interfaces by sending a Flow-to-Interface binding to its home agent. This Flow-to-Interface binding specifies the mobile host's care-of address(es) that the home agent should use to forward packets belonging to the flow.” Section 5.3.1

“The mobile host might decide to use the GSM network for its low bandwidth interactive flows, such as its voice or telnet traffic, which require low latency for user

satisfaction, but to use the Metricom network for its bulk data transfer flows, such as FTP traffic, which require high bandwidth but do not demand as low a latency.” Section 5.1.2

The above explicit recitations in Zhao make it clear that Zhao fails to disclose the home agent selecting a network and care-of address based on available bandwidth for each type of network to which the mobile terminal is connected as alleged in the Examiner’s Answer. The full context of the phrase “mobility-aware applications with an API to specify their QoS requirements instead of requiring them to bind flows explicitly to specific interfaces” (the first sentence of the above-passage of the Examiner’s Answer) in section 9 of Zhao is “As for future work, we plan to draw upon results from other projects such as the CMU Odyssey project [22] and provide mobility-aware applications with an API to specify their QoS requirements instead of requiring them to bind flows explicitly to specific interfaces.” As discussed in pages 18-20 of the Appeal Brief, reference [22] to Nobel et al. in the above sentence of Zhao discloses a operating system located on a mobile agent. The full context of the first sentence relied upon in the above portion of the Examiner’s Answer thus confirms that Zhao fails to disclose a home agent selecting a network based on the available bandwidth as claimed. Zhao, particularly when read in the context provided by reference [22] to Nobel et al., makes clear that it is a mobile host which makes such a selection.

Page 9 of the Office Action further argues “Zhao disclosed selection of a network among several networks by the home agent (see Fig. 5), the selection made ‘by the home agent in determining the most appropriate interfaces through which to forward packets addressed to a mobile host’ (see Section 8).”

The Examiner has taken the quotation from section 8 of Zhao out of context. In particular, the full context of the quotation from section 8 is as follows:

“IPv6 provides a *priority* (class) field that is used by routers to provide different services to different types of packets. This field can potentially be used in our proposal by the home agent in determining the most appropriate interfaces through which to forward packets addressed to a mobile host in the absence of Flow-to-Interface binding registrations.”

The determination by the home agent described in section 8 of Zhao is therefore based upon a priority (class) field in the absence of Flow-to-Interface binding registrations. Section 8 of Zhao thus discloses a determination based on a particular priority (class) field, not based on an available bandwidth as claimed. Moreover, the Examiner’s statement that “Zhao disclosed selection of a network among several networks by the home agent (see Fig. 5), the selection made ‘by the home agent in determining the most appropriate interfaces through which to forward packets addressed to a mobile host’ (see Section 8)” combines two teachings of Zhao which address different scenarios. In particular, “Fig. 5 illustrates the routing of datagrams to and from a mobile host away from home, once the mobile host has registered some Flow-to-Interface bindings with its home agent (emphasis added)” (see the sentence bridging the left and right columns of page 151), whereas the sentence in section 8 explicitly addresses a situation “in the absence of Flow-to-Interface binding registrations (emphasis added).”

Page 9 of the Examiner’s Answer further argues “...the selection of a network by a home agent based on a binding as in Zhao *is related to* QoS/bandwidth considerations, which reads on the claim limitation argued by Appellant (emphasis added).” For the reasons discussed above, Appellant submits that Zhao fails to disclose a home agent selecting an appropriate network based on the available bandwidth for each type of network to which a mobile terminal is currently connected. Moreover, even if a selection by a home agent as in Zhao is “related to” QoS/bandwidth considerations (Appellant submits that it is not in any case) as alleged by the Examiner’s Answer, such a selection by the home agent which is merely “related to”

QoS/bandwidth considerations would fail to provide an explicit or implicit disclosure of the above-noted claim limitation. The absence of any element of the claim from the cited reference negates anticipation. See, e.g., *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715 (Fed. Cir. 1984). Anticipation is not shown even if the differences between the claims and the prior art reference are insubstantial and the missing elements could be supplied by the knowledge of one skilled in the art. See, e.g., *Structural Rubber Prods.*, 749 F.2d at 716-17.

For at least the reasons set forth above and discussed in detail in the previously-filed Appeal Brief, it is respectfully requested that the rejections on appeal be reversed.

Respectfully submitted,

NIXON & VANDERHYTE P.C.

By: 

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